



MODEL 20000B

LONG DISTANCE FIBER HIPPI MODEM

Features / Benefits

Features

- ▶ Full duplex HIPPI channel using dual fibers
- ▶ Full HIPPI bandwidth of 800 Megabits per second (Mbps) on each duplex channel
- ▶ Ports transmit and receive reliably over distances of up to 20 kilometers with singlemode fiber
- ▶ Expected Bit Error Rate of 1×10^{-14} or less over maximum supported distances
- ▶ Ports utilize SC fiber connections

Benefits

- ▶ Provides long distance extension of existing HIPPI products
- ▶ Provides the high data reliability and integrity of HIPPI channels for dedicated links
- ▶ Compact size, moderate power requirements, and low cost

Specifications/Standards

- ▶ Physical
 - Dimensions: (HxWxD) 17" x 12.5" x 1.75" (43 cm x 31.6 cm x 4.4 cm)
 - Weight: 3.6 lb. (1.6 kg)
- ▶ Standards Compliance
 - Serial HIPPI ANSI X3.300-1997 HIPPI-SERIAL Standard.
- ▶ Power
 - Supply: Autoranging 100-240 VAC, 50/60 Hz
 - Power Consumption: 56 Watts max
- ▶ Environmental
 - Environment Temperature 32° - 104° F
 - Humidity 10% - 90% non-condensing
 - Altitude to 10,000 feet (3,048 meters)
- ▶ Safety Certifications (pending)
 - EN 60950
 - CSA-C22.2 No. 950-93
- ▶ Electromagnetic Emissions Certifications (pending)
 - FCC Class B
 - CSA/TUV

Overview

The Model 20000B Long Distance Fiber Modem is a stand-alone rack-mountable unit providing a fiber optic transmitter/receiver for long distance transmission of information using the serial HIPPI protocol. The unit can be connected to any HIPPI host for extension of the host interconnect distance from 25 meters to 20 kilometers.

Host Computer Interface

The Long Distance Fiber Modem can be driven by any host supporting the ANSI X3.183-1991 HIPPI-PH (HIPPI Physical) Standard. It will support the full rate of data transmission by the host under this standard, up to the maximum 800 Mbps in each direction.

Delay Buffering for Long Distance Connections

The Long Distance Fiber Modem provides internal round-trip buffering and logic to support continuous operation of a single HIPPI channel over distances of 20km or less. This enables users to avoid the round-trip connection delay which would normally be incurred over long links, and lets facilities establish reliable dedicated channels between high volume data producers and consumers. At the same time, the modem supports normal HIPPI throttling protocol, so that interconnected hosts using the link will not require software modifications in order to operate properly.

Metropolitan Area Networks

This technology provides a standard, high data volume technology for use in metropolitan area networks. HIPPI is known for its ability to transfer large quantities of error-free data at high speed, and this device makes it feasible to consider using HIPPI technology for plant-wide and city-wide applications.

Singlemode Fiber and Multimode Fiber options

The Long Distance Fiber Modem will function ably and reliably over either singlemode or multimode fiber. When used with 8/125 micron singlemode fiber, the transceiver will function reliably over distances up to 20 kilometers. When used with 62.5/125 micron FDDI-grade multimode fiber, the transceiver will function reliably over distances up to 0.3 kilometer.

Reliability of Transmission

The Long Distance Fiber Modem has expected bit error rates of less than 1×10^{-14} , when the modem is used with good quality cables within the maximum distance specification.

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